UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,865	03/18/2004	Philippe Jerome Didier Riviere	88265-7344	5444

29157 7590 08/07/2008

BELL, BOYD & LLOYD LLP
P.O. Box 1135
CHICAGO, IL 60690

EXAMINER	
CHAWLA, JYOTI	
ART UNIT	PAPER NUMBER
1794	

NOTIFICATION DATE	DELIVERY MODE
08/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENTS@BELLBOYD.COM

Office Action Summary	Application No.	Applicant(s)	
	10/802,865	RIVIERE ET AL.	
	Examiner	Art Unit	
	JYOTI CHAWLA	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-27* is/are pending in the application.

4a) Of the above claim(s) *17-27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 7-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's amendment filed May 9, 2008 has been entered. Claims 1 and 7 have been amended, and claim 6 has been cancelled, claims 17-27 remain withdrawn from consideration pertaining to a non-elected invention. Claims 1-5, 7-16 remain pending and are examined in the application.

Claim Rejections - 35 USC § 112

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Rejection of claims 1-5, 7-16 under 35 USC 112 second paragraph, as being indefinite for recitation of sweetening agent mixture composition have been withdrawn based on applicant's amendments dated 5/9/2008.

Rejection of claims 1-5, 7-16 for being indefinite for the recitation of "freezing temperature range" without specifying the range has been withdrawn based on applicant's arguments regarding the "freezing temperature" (Remarks, 5/9/08, page 9).

Rejection of claims 1-5, 7-16 under 35 USC 112 second paragraph, as being indefinite for recitation of relative terms "malleable" and "extrudable" are maintained for reasons of record. Claim 1, as amended is still unclear for the recitation of relative terms "malleable" and "extrudable", as stated in the previous office actions dated April 5, 2007 and October 19, 2007, it is not clear as to what standard of malleability or extrusion is employed to establish if a frozen dessert product is adequately malleable or extrudable according to the claim as recited. For the purposes of prior art comparison a frozen dessert composition that claims to be extrudable or soft serve or comprising microcrystalline cellulose (nucleating agent, as disclosed) would be regarded as having the property of nucleating water during the freezing of the frozen dessert composition so that the composition, independent of any incorporation of gas, is malleable and extrudable at freezing temperatures, as recited in the instantly claimed invention.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action

Note: The term “oligosaccharide”, as referred in the office action below, has been interpreted as saccharide compounds with "a few" repeating units, wherein the number of repeating units generally varies from 3-10. This interpretation is based on the definition of prefix "oligo" obtained from the IUPAC Gold site which sources the PAC, 1995, 67, 1307, page 1353 of the Glossary of class names of organic compounds and reactivity intermediate Recommendations 1995. A copy of the reference has been included with the office action for applicant's review.

(A) Claim 1-5, 7, 9-16 are rejected under 35 U.S.C. 103(a) as being obvious over Whelan et al (US 5,084,295) in view of Hilker et al, hereinafter Hilker (US 3128193).

The references and rejection are incorporated herein and as cited in the office action mailed January 11, 2008.

Regarding claim 1, Whelan et al, hereinafter Whelan, teaches a frozen dessert composition comprising of water, proteins, and fat, sweetening agents and stabilizing agents (Abstract and Column 6, lines 1-8, lines 31-38). Regarding the frozen water, Whelan teaches water, however, since the reference teaches a frozen dessert composition, the finished frozen product would comprise frozen water as recited.

Regarding the proportion of the sweetening mixture to be 6-30% of the frozen confection, as recited in claim 1, Whelan’s sweetening composition comprises from about 10 to about 20% of the product (Column 12, lines 5-16) and the reduced calorie sugars comprise from about 10-20%. Thus Whelan teaches of a sweetening mixture comprising glucose and glucose polymers including polyols, and high intensity

sweeteners combined in the range of 10 to 40%, which falls in applicant's range (6-30%) as recited in claim 1.

The sweetening agents as taught by Whelan include glucose, fructose, maltose (glucose polymer with two glucose units) corn syrup, maple syrup, honey, brown sugar, refiner's syrup (i.e., liquid sugar or sucrose) etc. Whelan further teaches addition of reduced calorie or no calorie sweeteners that replace the sweetening composition partially or completely (Column 12, lines5-16). It is noted that corn syrup comprises mainly of glucose, maltose (two molecules of glucose), maltotriose (three molecules of glucose) and oligosaccharides of glucose with degree of polymerization greater than 3, as evidenced by Handbook of Industrial chemistry, pages 188-189 table 6.2 (Already part of record). Thus, the sweeteners taught by Whelan include glucose as discussed above and glucose polymers including maltose (Column 12, line 6) and corn syrup which primarily contains dextrose/glucose, maltose and maltotriose, (both glucose polymers with n=2 and n=3 respectively) and polyols and high intensity sweeteners (Columns 8, 25-53 and Column 12, lines 5-68).

Regarding the amount of glucose polymers representing from 10-50% (claim 1) of the sweetening agent mixture as recited by the applicant, Whelan teaches corn syrup having the value of 62 DE, i.e., depending on the method of hydrolysis of starch the glucose (dextrose) content of the corn syrup would vary from 36 to 39% on dry weight basis and the rest 61-64% of the sweetener in corn syrup is glucose polymers, like maltose, maltotriose and higher oligosaccharides of glucose (as evidenced by Handbook of Industrial chemistry, pages 188-189 table 6.2, already of record). As evidenced by the information from the Handbook of Industrial chemistry, the glucose polymer content of the glucose/corn syrup as taught by Whelan lies within 61-64% of the corn syrup composition and of the corn syrup (glucose polymers) content. Further in Example 1, Whelan teaches of nutritive sweetener comprising dry sucrose 1.87% + 0.6%, Liquid sugar 14.93% and 62 DE Corn Syrup 2.98% in the total frozen confection composition of 200%. The total of dry sucrose, liquid sugar and corn syrup amounts to about 10% by weight and the glucose polymers only in corn syrup amount to 2/3 of the corn syrup, i.e., glucose polymers comprise about 10% of the total amount of sweetener

comprising dry sucrose, liquid sugar and corn syrup, which falls in applicant's recited range for glucose polymers of 10-50%. Further, Whelan also teaches of varying the composition of the sweetener mixture in order to modify the caloric content of the final product. Thus, Whalen teaches of sweeteners, where glucose polymers, such as, maltose, maltotriose and other oligosaccharides of glucose present in corn syrups (Column 12) comprise 10-50% of the weight of sweetening agent composition. Thus Whelan reference reads upon the instantly claimed invention.

Regarding the amount of glucose and glucose polymers comprising at least 90% by weight of the sweetening agent mixture, as recited in the newly amended claim 1 and as clarified by the applicant's remarks filed on may 9, 2008 (Page 9, lines 5-8), where the applicant states that the sweetening composition comprises at least 90% by weight of glucose and glucose polymers and other components, which does not specifically state that the glucose and glucose polymers are the only two components that make up at least 90% of the sweetening agent mixture. Whalen teaches of glucose, sucrose, invert sugar, maltose, corn syrup and high maltose corn syrup, as sources of carbohydrate sweeteners, which comprise of glucose and glucose polymers (Column 12, lines 5-16). Whalen teaches that the amount of nutritive sweeteners is selected to provide the desired sweetness intensity in the frozen dessert product (Column 12, lines 11-13). Whalen also teaches that the amount of nutritive sweeteners can be varied based on the calorie reduction benefit desired (Column 12, lines 17-18). Thus, Whalen teaches of sweetener composition comprising glucose and glucose polymers, such as, maltose, maltotriose and other oligosaccharides of glucose present in corn syrups (Column 12 and) as well as low calorie sugar alcohols and other polysaccharides comprise 0-100% of the sweetening agent composition. Thus Whelan reference reads upon the instantly claimed invention. The blending of sweeteners was well known in the art at the time of the invention for their art recognized function. Hilker has been referenced to clarify that it was known to include a sweetening mixture comprising glucose and glucose polymers in the recited range of the applicant. Hilker teaches of a low fat frozen dessert with an aqueous component and a fat component. The aqueous

component comprises water, protein, sweetening agents, stabilizers and flavoring ingredients (Column 2, lines 9-31) as recited by the applicant in claim 1. The sweetening agents taught by Hilker are sucrose and corn syrup solids (Column 3, Lines 53-60, Example I). Sucrose is a polymer comprising glucose. Corn syrup solids are hydrolysis products of corn starch where complete hydrolysis of corn starch to dextrose has not occurred and as a result corn syrup solids include low dextrose, i.e., low amount of glucose, but high amounts of dextrins, maltodextrins and other glucose oligomers and polymers. Thus, Hilker teaches the sweetening agent wherein glucose and polymers of glucose are used together as a mixture, and the mixture comprises up to 100% of the sweetener mixture, which includes applicant's recited range (at least 90% of sweetener mixture comprising glucose polymers and glucose).

Thus, blending of sweeteners was well known in the art at the time of the invention, for their art recognized function. Amount of sweetener mixture in a f4rozen confection is selected based on the desired sweetness in ice cream type frozen confections (Whelan, Column 12). Relative proportion of glucose and glucose polymers in the range recited by the applicant was known at the time of the invention (Whelan and Hilker). Therefore, it would have been a matter of routine determination by experimentation for one of ordinary skill in the art at the time of the invention to modify the sweetener composition at least based on the availability of sweeteners and the sweetness intensity and specific sweetness effect desired in the product absent any clear and convincing evidence and/or arguments to the contrary.

Further, attention is invited to *In re Levin*, 84 USPQ 232 and the cases cited therein, which are considered in point in fact situation of the instant case. At page 234, the Court stated as follows: This court has taken the position that new recipes or formulas for cooking food which involve the addition or elimination of common ingredients, or for treating them in ways which differ from the former practice, do not amount to invention, merely because it is not disclosed that, in the constantly developing art of preparing food, no one else ever did the particular thing upon which the applicant asserts his right to a patent. In all such cases, there is nothing patentable unless the applicant by a proper showing further establishes a coaction or cooperative relationship between the

selected ingredients, which produces a new, unexpected and useful function. In re Benjamin D. White, 17 C.C.P.A. (Patents) 956, 39 F.2d 974, 5 USPQ 267; In re Mason et al., 33 C.C.P.A. (Patents) 1144, 156 F.2d 189, 70 USPQ 221.

Regarding the stabilizing agents as recited in claim 1, Whelan teaches stabilizing agents including microcrystalline cellulose, locust bean gum, etc., in the frozen dessert composition, which includes applicant's recited stabilizing agents. Whelan teaches that stabilizing agents produce smoothness in the textural properties of the product and retard ice crystal growth during storage of the product (Column 14, lines 39-55). Whelan also teaches of emulsified particle size of 5 microns or less such that the frozen dessert produced has a smooth, creamy and non-gritty mouth feel (Column 7 and 14). Whelan further teaches that the fat is emulsified in such a way as to give the final product the softness, smoothness and creaminess of the conventional ice-cream products, i.e., the product is malleable and extrudable. Whelan reference also teaches of the stabilizers, such as microcrystalline cellulose, as recited by the applicant, in the recited range of the applicant. The particle size of the stabilizing agent, such as microcrystalline cellulose is small enough to act as a nucleating agent. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that stabilizer, such as microcrystalline cellulose, upon addition to a frozen confection composition of Whalen, will function in a similar manner and act as the nucleating agent for water during the freezing of the frozen dessert composition so that the composition, independent of any incorporation of gas, is malleable and extrudable at freezing temperatures, as the microcrystalline cellulose in the instantly claimed invention, absent any clear and convincing evidence and arguments to the contrary.

Further, regarding the malleability characteristic of the dessert, applicant remarks dated 5/9/2008, page 10, lines 2-5, which refer to the specification (Page 8, lines 19-22) where it is stated that "sufficient malleability of the dessert is achieved when the protein level in the composition is between 3-18% relative to the total weight of the composition of the dessert". Whelan teaches of 3-15% milk solids other than fat, which include protein and milk sugar. Thus protein level as taught by Whalen falls within the

applicant's range of protein to achieve sufficient malleability. Therefore, Whelan teaches of frozen dessert composition with sufficient malleability as defined by the applicant.

Regarding the amendment to claim 7, Whalen teaches of glucose, sucrose, invert sugar, corn syrup (i.e., glucose syrup), maltose, high maltose corn syrup and fructose as possible components of the sweetener composition (column 12, lines 5-16). Whalen and Hilker are silent regarding the percentage of fructose being less than 1% in the glucose syrup of the composition. However, glucose syrup or corn syrup, having fructose content less than 1% were known and available at the time of the invention, as evidenced by Handbook of Industrial chemistry, pages 188-189 table 6.2 (Already part of record). It was also known at the time of the invention that fructose is sweeter than sucrose, which in turn is sweeter than glucose on an equivalent weight basis. Therefore, it would have been a matter of routine optimization experimentation for one of ordinary skill in the art at the time the invention was made to substitute one art recognized functional equivalent (i.e., fructose or high fructose corn syrup or sucrose) as taught by Whalen for another (i.e., maltose, glucose, high maltose corn syrup, corn syrup etc. sweeteners comprising less than 1% fructose) as also taught by Whelan, in the frozen confection. One would have been motivated to choose the specific sweeteners and modify the sweetener component at least based on the availability, cost and the desired level of sweetness in the frozen product. Thus claim 7, is obvious over Whelan in view of Hilker, absent any clear and convincing evidence and arguments to the contrary.

Regarding claims 2-5, 9-16 refer to the rejection made in the office action dated January 11, 2008.

(B) Claim 8 is rejected under 35 U.S.C. 103(a) as being obvious over Whelan et al and Hilker as applied to claims 1-5, 7, 9-16 and 28 above further in view of Cole et a. (US 4,452,824).
Whelan and Hilker have been applied to amended claims 1 and 7 above

The references and rejection are incorporated herein and as cited in the office action mailed January 11, 2008.

(C) Claims 1-5 and 8-16 are rejected under 35 U.S.C. 103(a) as being obvious over Morley (US 4,427,701) in view of Cole et al (US. 4,452,824).
The references and rejection are incorporated herein and as cited in the office action mailed January 11, 2008.

Regarding amended claim 1, Morley teaches a frozen dessert comprising water, proteins, fat, sweetening agents and stabilizing agents. Morley teaches of a frozen dessert and it would be expected that the water in the frozen dessert is frozen. The sweetening agents include fructose, corn syrup, etc at a range from 22 to 30% (Column 6 lines 26-37), which is within applicant's recited range.
Regarding the newly added limitation that glucose polymers represent 10-50% of the sweetening mixture composition in the frozen dessert, Morley teaches of sweeteners like corn syrup (i.e., glucose syrup), corn syrup solids and dextrose (i.e., glucose) in varying amounts in the sweetening mixture for the frozen confection (Column 6, lines 33-58). It is noted that corn syrup and corn syrup solids contain maltose, maltotriose and maltodextrin, and other oligosaccharides, which are glucose polymers (as evidenced by Handbook of Industrial chemistry, pages 188-189 table 6.2 {Already part of record}). Morley also teaches of 8.5% 36 DE corn syrup solids (which contain about 10% glucose and rest 90% glucose polymers) in total sweetener composition of 24.8% by weight (Column 9, Example 1). According to example 1 of Morley
Glucose polymers are 7.65% (90% of 8.5%)
Total sweetener content of 24.8 %,
i.e., glucose polymers proportion is (7.65/24.8)X 100= 30.84%
Thus the amount of glucose polymers in the sweetener mixture composition as taught by Morley is about 30%, which falls within applicant's recited range for glucose polymers 10-50%.

Regarding the amount of glucose and glucose polymers comprising at least 90% by weight of the sweetening agent mixture, as recited in the newly amended claim 1 and as clarified by the applicant's remarks filed on may 9, 2008 (Page 9, lines 5-8), where the applicant states that the sweetening composition comprises at least 90% by weight of glucose and glucose polymers and other components, which does not specifically state that the glucose and glucose polymers are the only two components that make up at least 90% of the sweetening agent mixture. Morley teaches of employing a combination of saccharides that causes freezing point depression, sweetness, body, texture and flavor (Column 6, lines 17-20). Morley teaches that the sweeteners can be corn syrup (i.e., glucose syrup) preferably 36 DE and 24 DE corn syrups, dextrose (i.e., glucose), fructose, sorbitol , sucrose, mannitol, which are important in providing a soft serve frozen confection (Column 6, lines 33-47). Morley also teaches that sweetening agent component can be modified based on the subjective properties desired in the final product, i.e., blending of sweeteners in accordance with the properties desired in the finished product such as, in fat free compositions, Morley teaches of adding low DE corn syrup in addition to the regular corn syrup (Column 6, lines 38-45). Morley is silent about glucose polymers and glucose comprising at least 90% of the sweetening agent mixture. It would have been obvious to one of ordinary skill in the art to expect that the amount of sweetener included is an experimental result variable based on sweetness intensity of the particular sweetener and the sweetness effect desired in the product. Cole teaches of soft frozen dessert formulation wherein some of the saccharide or sweetener formulations comprise entirely of corn syrup solids and dextrose, i.e., 100% of the sweetener composition comprises glucose and glucose polymers (Columns 7-8, Tables 1-3, composition run 89, 91-92), as is instantly claimed. Cole further teaches that the compositions have adequate sweetness, softness and extrudability, as is instantly claimed (Columns 7-9). Thus, sweetener compositions comprising at least 90% of glucose and glucose polymers were known in the art of making frozen dessert at the time of the invention (Cole). It was also known to vary the sweetener composition for a frozen dessert based on the taste, texture, freezing point depression and other subjective properties desired in the final product (Morley and Cole). Further it was also

known that the sweetener composition containing corn syrup solids (glucose and glucose polymers) with or without dextrose (glucose) in a frozen dessert composition can yield a soft, creamy , adequately sweet and extrudable frozen dessert composition, which can be stored in home freezer (Cole, columns 7-9), which is also the intent of the applicant. Therefore, it would have been obvious to one of ordinary skill in the art to modify the sweetener composition of Morley based on the teaching from Cole and primarily include a combination of glucose and glucose polymers, which would provide desired sweetness, body, texture, flavor to produce a soft serve or malleable product at freezer temperature, while also providing the desired freezing point depression in the frozen dessert, such that the dessert can be extruded. One would have been further motivated to modify the sweetener composition in order to make a frozen composition that has the storage stability in home freezer for several weeks without the development of undesirable iciness (Cole, Column 9lines 1-5).

The stabilizing agents comprise microcrystalline cellulose, locust bean gum, guar gum etc (Column 7 lines 30-33) and amount of stabilizer as taught by Morley about 0.05 to about 1.1%, this range is within applicant's recited range (Column 6 line 68, Column 7 lines 1-2). Thus, Morley teaches of the stabilizers as recited by the applicant, in the recited range of the applicant. The particle size of the stabilizing agent, such as microcrystalline cellulose is small enough to act as a nucleating agent. Morley also teaches that the frozen confection upon storage in grocery store or hone freezer, retains soft serve characteristic when dispensed directly from the package, i.e., malleable, as instantly claimed. Further, regarding the malleability characteristic of the dessert, applicant remarks dated 5/9/2008, page 10, lines 2-5, which refer to the specification (Page 8, lines 19-22) where it is stated that “sufficient malleability of the dessert is achieved when the protein level in the composition is between 3-18% relative to the total weight of the composition of the dessert”. Morley teaches of protein level ranging from 4-5.5%, which falls within the applicant’s range of protein to achieve sufficient malleability. Therefore, Morley teaches of frozen dessert composition with sufficient malleability as defined by the applicant. Morley also teaches that the frozen confection

in a package can also be manipulated to extrude the soft serve frozen confection under hand pressure, i.e., extrudable (Column 4, lines 14-28), as instantly claimed. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that stabilizer, such as microcrystalline cellulose, upon addition to a frozen confection composition of Morley, will function in a similar manner and act as the nucleating agent for water during the freezing of the frozen dessert composition such that Morley's composition, independent of any incorporation of gas, is malleable and extrudable at freezing temperatures, as the microcrystalline cellulose in the instantly claimed invention, absent any clear and convincing evidence and arguments to the contrary.

Regarding newly amended claim 7, Morley teaches of corn syrup or glucose syrup with 36 DE (Dextrose Equivalent) with or without further addition of 26 DE as part of the sweetener mixture (column 6, lines 37-39). Corn syrups contain, dextrose (glucose), maltose (glucose polymer with 2 glucose molecules), maltotriose (glucose polymer with 3 glucose molecules) and other glucose oligosaccharides or polymers of glucose (as evidenced by Wiles Encyclopedia of Food Science and Technology, page 2242 {Already part of record}). The amount of fructose in an untreated corn syrup which has not been treated with an enzyme to convert the glucose into fructose is negligible. Fructose containing corn syrups are generally known as high fructose corn syrup or fructose corn syrup. Morley teaches of corn syrup (i.e., glucose syrup) as one of the main sweetener components and corn syrup contains negligible amount of fructose. Therefore, Morley teaches of corn or glucose syrup as recited in the amended claim 7.

Regarding claims 2-5 and 8-16, applicant is referred to the office action dated January 11, 2008.

Response to Arguments

Applicant's arguments filed May 9, 2008, regarding the rejection of claims 1-5, 7-16 have been fully considered but have not been found persuasive.

Regarding the claim rejections under 35 USC 112, applicant is referred to the office action above.

I) In response to applicant's argument that "if the percentage of glucose increases in the composition, the frozen dessert obtained is more malleable" (Remarks, page 12, lines 8-10).

Similarly applicant's remarks that "Applicant's have surprisingly found that it is possible to reduce the proportion of fat in a frozen dessert without limiting the malleability of the dessert at freezing temperature…by using the sweetening agent mixture of glucose polymers and glucose at the levels as claimed" ; "the presence, in the proportions as claimed , of these glucose polymers can make it possible to avoid or reduce the greasy taste of frozen dessert without reducing the dessert's spoonable character and its capacity to be distributed by the nozzle of a pressurized container at the freezing temperatures"; and ""the sweetening agents mixture can comprise from 10-50% of glucose polymers, it is possible to not only compensate for the reduction of the quantity of fat to be used in the composition of frozen dessert according to the present invention, but also to allow a modification of the nature of the fat" (Remarks, page 12, lines 11-24)

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the "reduce the proportion of fat in a frozen dessert without limiting the malleability of the dessert at freezing temperature", "glucose polymers can make it possible to avoid or reduce the greasy taste of frozen dessert without reducing the dessert's spoonable character", "dessert's spoonable character", "capacity to be distributed by the nozzle of a pressurized container", "reduction of the quantity of fat" and "allow a modification of the nature of the fat" (Remarks, pages 10 and 12) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

II) In response to applicant's argument that "recited ranges as claimed in independent claim 1, achieve unexpected results relative to the prior art range and are not disclosed in the prior art references" (Remarks, page 10, lines 25-29), the applicant is referred to the rejection of claim 1 above where Whalen in view of Hilker teaches the claimed sweetener ranges. Similarly, the applicant is referred to rejection of claim 1 above, where Morley in view of Cole teaches the recited sweetener composition. Further it is noted that to include an increased amount of glucose and glucose polymers in the sweetener mixture composition as disclosed by Hilker in one instance and Cole in the other would be a matter of judicious selection of a known component already disclosed in the composition. One would have been motivated to increase the amount of a given component to enhance the effect of its desirable properties without adversely affecting the flavor or other properties of the composition. This would not have involved inventive step as optimal ranges for a recognized result effective variable, such as glucose, maltose, maltotriose or other glucose oligomers or polymers as sweetening agents, may be identified through routine experimentation (MPEP 2144.05). To increase such a variable and obtain increased depression of freezing point, increased creaminess or smoothness of texture is nothing more than the achievement of expected results.

III) In response to applicant's arguments against the references individually (Remarks, pages 12-15), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case Whelan in view of Hilker in rejection (A) and Morley and Cole in rejection (C) teach of a frozen confection composition with sweetener, water, protein, fat, emulsifier, thickeners and stabilizing agents in the instantly claimed ranges. The references also teach of glucose polymers and glucose (dextrose), and glucose syrup as part of the sweetener composition, where the amount of glucose polymers and the total sweetening mixture component falls in the instantly

claimed ranges (See rejection above and in previous office action dated January 11, 2008).

Regarding applicant's argument that Hilker does not teach of glucose or glucose polymers represent 10-50% of the weight of sweetening agent mixture (Remarks, pages 13 and 14), applicant is referred to the office action above where Whalen and Morley teach glucose polymers in the recited amount. Applicant is also referred to Hilker Columns 3 and 4 where Hilker teaches of corn syrup solids, i.e., dextrose or glucose in the amounts ranging from 7.5-8% of the frozen confection which falls in the instantly claimed range of 6-30% for the total sweetener and 1.8 to 12% for glucose as discussed in the office action above. Thus the reference also teaches that higher proportion of glucose was known to be used as sweetener in the art of making frozen confections. Thus the references teach of frozen confections with glucose content in the instantly claimed range. In addition applicant is also referred to Cole, where the Tables 1-3 in Columns 7-8 show various saccharide or sweetener compositions, where 89, 91-92 comprise of corn syrup solids optionally with added dextrose as sweetener, i.e., the entire sweetener composition comprises of glucose and glucose oligomers, such as maltose, maltotriose and higher oligosaccharides.

Regarding the fructose content of glucose syrup as recited in the amended claim 7, applicant is referred to the rejection of claim 7 above.

IV) Applicant's argument that "recited ranges glucose polymers representing from 10-50% of the weight of the sweetening agent mixture as claimed in the independent claim 1 achieve unexpected results relative to the prior art range" (Remarks, page 14, lines 25-27)) has not been found persuasive because the prior art references (Whelan and Morley) include glucose polymers in the instantly claimed range of claim 1. Thus if the amount of total sweetener and relative amount of glucose polymer in the frozen confection in the prior art is in the recited range, then the sweetening and texturizing effects of glucose polymers in the prior art would also be similar to the ones in the instantly claimed invention. Therefore, not only will one of ordinary skill at the time of the invention have known to add total sweetener and glucose polymers in the instantly

claimed range in the frozen dessert composition, but one would also have a reasonable expectation that the textural and sweetening characteristics that result from the presence of glucose polymers in the instantly claimed range will also be present in the frozen dessert composition of Whalen and Morley, similar to the textural and sweetening characteristics as recited in the instantly claimed invention, absent any clear and convincing evidence and or arguments to the contrary. Thus applicant's assertion of unexpected results has not been found persuasive.

Applicant's arguments and remarks presented on May 9, 2008 have been fully considered and have not been found persuasive and the claims 1-5, 7-16 remain rejected for the reasons of record.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTI CHAWLA whose telephone number is (571)272-8212. The examiner can normally be reached on 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jyoti Chawla
Examiner
Art Unit 1794

/KEITH D. HENDRICKS/
Supervisory Patent Examiner, Art Unit 1794